

What is claimed is:

1. A display device comprising:

a face substrate which forms anodes and phosphors on an inner surface thereof;

a plurality of cathode lines which extend in one direction and are arranged in parallel in another direction which crosses one direction;

a plurality of electron sources which are arranged on the cathode lines in an electrically conductive manner;

control electrodes which face the cathode lines in a display region and have electron passing apertures for allowing electrons from the electron sources to pass through the electron passing apertures to the face substrate side;

a back substrate which forms the control electrodes and the cathode lines on an inner surface thereof and faces the face substrate in an opposed manner with a given distance therebetween;

a support body which is interposed between the face substrate and the back substrate in a state that the support body surrounds the display region and holds the given distance; and

a sealing material which hermetically seals end faces of the support body and the face substrate and the back substrate respectively, wherein

a connecting portion of the cathode line with the electron

source has a composition which includes a conductor and an insulator, and the composition is determined such that an occupancy rate of the conductor is set equal to or more than an occupancy rate of the insulator.

2. A display device according to claim 1, wherein the occupancy rate of the insulator is less than 50%.

3. A display device according to claim 1, wherein a surface of the back substrate in the vicinity of the cathode lines exhibits an uneven shape.

4. A display device comprising:

a face substrate which forms anodes and phosphors on an inner surface thereof;

a plurality of cathode lines which extend in one direction and are arranged in parallel in another direction which crosses one direction;

a plurality of electron sources which are arranged on the cathode lines in an electrically conductive manner;

control electrodes which face the cathode lines in a display region and have electron passing apertures for allowing electrons from the electron sources to pass through the electron passing apertures to the face substrate side;

a back substrate which forms the control electrodes and the cathode lines on an inner surface thereof and faces the face substrate in an opposed manner with a given distance therebetween;

a support body which is interposed between the face substrate and the back substrate in a state that the support body surrounds the display region and holds the given distance; and

a sealing material which hermetically seals end faces of the support body and the face substrate and the back substrate respectively, wherein

a layer in which an occupancy rate of a conductor is high is interposed in a connecting portion between the cathode line and the electron source.

5. A display device according to claim 4, wherein the layer in which the occupancy rate of the conductor is high is either a silver particle layer or a gold particle layer.